

ABSTRACT OF THE DISCLOSURE

To assure the multiprocessing performance of CPU on a microprocessor, the invention provides a method of memory mapping for multiple concurrent processes, thus minimizing cache thrashing. An OS maintains a management (mapping) table for controlling the cache occupancy status. When a process is activated, the OS receives from the process the positional information for a specific part (principal part) to be executed most frequently in the process and coordinates addressing of a storage area where the process is loaded by referring to the management table, ensuring that the cache address assigned for the principal part of the process differs from that for any other existing process. Taking cache memory capacity, configuration scheme, and process execution priority into account when executing the above coordination, a computer system is designed such that a highest priority process can have a first priority in using the cache.

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